

9 VAC 25-720 WATER QUALITY MANAGEMENT PLANNING REGULATION11

9 VAC 25-720-50. Potomac-Shenandoah River Basin.

A. Total maximum daily load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/ County	WBID	Pollutant	WLA	Units
1.	Muddy Creek	Nitrate TMDL Development for Muddy Creek/Dry River, Virginia	Rockingham	B21R	Nitrate	49,389.00	LB/YR
2.	Blacks Run	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Sediment	32,844.00	LB/YR
3.	Cooks Creek	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Sediment	69,301.00	LB/YR
4.	Cooks Creek	TMDL Development for Blacks Run and Cooks Creek	Rockingham	B25R	Phosphorus	0	LB/YR
5.	Muddy Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham	B22R	Sediment	286,939.00	LB/YR
6.	Muddy Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham	B22R	Phosphorus	38.00	LB/YR
7.	Holmans Creek	TMDL Development for Muddy Creek and Holmans Creek, Virginia	Rockingham/ Shenandoah	B45R	Sediment	78,141.00	LB/YR
8.	Mill Creek	TMDL Development for Mill Creek and Pleasant	Rockingham	B29R	Sediment	276.00	LB/YR

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		Run					
9.	Mill Creek	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B29R	Phosphorus	138.00	LB/YR
10.	Pleasant Run	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B27R	Sediment	0.00	LB/YR
11.	Pleasant Run	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B27R	Phosphorus	0.00	LB/YR
12.	Linville Creek	Total Maximum Load Development for Linville Creek: Bacteria and Benthic Impairments	Rockingham	B46R	Sediment	5.50	TONS/YR
13.	Quail Run	Benthic TMDL for Quail Run	Rockingham	B35R	Ammonia	7,185.00	KG/YR
14.	Quail Run	Benthic TMDL for Quail Run	Rockingham	B35R	Chlorine	27.63	KG/YR
15.	Shenandoah River	Development of Shenandoah River PCB TMDL (South Fork and Main Stem)	Warren & Clarke	B41R, B55R, B57R, B58R	PCBs	179.38	G/YR
16.	Shenandoah River	Development of Shenandoah River PCB TMDL (North Fork)	Warren & Clarke	B51R	PCBs	0.00	G/YR
17.	Shenandoah River	Development of	Warren & Clarke	WV	PCBs	179.38	G/YR

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		Shenandoah River PCB TMDL (Main Stem)					
18.	Cockran Spring	Benthic TMDL Reports for Six Impaired Stream Segments in the Potomac-Shenandoah and James River Basins	Augusta	B10R	Organic Solids	1,556.00	LB/YR
19.	Lacey Spring	Benthic TMDL Reports for Six Impaired Stream Segments in the Potomac-Shenandoah and James River Basins	Rockingham	B47R	Organic Solids	680.00	LB/YR
20.	Orndorff Spring	Benthic TMDL Reports for Six Impaired Stream Segments in the Potomac-Shenandoah and James River Basins	Shenandoah	B52R	Organic Solids	103.00	LB/YR

~~B. Stream segment classifications, effluent limitations including water quality based effluent limitations, and waste load allocations.~~ B. Non - TMDL Waste Load Allocations.

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TABLE B1 – POTOMAC RIVER SUB-BASIN RECOMMENDED SEGMENT CLASSIFICATIONS

SEGMENT NUMBER	DESCRIPTION OF SEGMENT	MILE TO MILE	CLASSIFICATION
1-23	Potomac River tributaries from the Virginia-West Virginia state line downstream to the boundary of the Dulles Area Watershed Policy	176.2—149.0	WQ
1-24	Potomac River tributaries located within the boundaries of the Dulles Area Watershed Policy	149.0—118.4	WQ
1-25	Potomac River tributaries from the downstream limit of the Dulles Area Watershed Policy to Jones Point	118.4—107.6	WQ
1-26	Potomac River tributaries from Jones Point downstream to Route 301 bridge	107.6—50.2	WQ
1-27	All Streams included in the Occoquan Watershed Policy	=====	WQ
1-28	Potomac tributaries from Route 301 bridge downstream to the mouth of the Potomac River	-50.2-0.0	EL

TABLE B2 – POTOMAC RIVER SUB-BASIN - RECOMMENDED PLAN FOR WASTEWATER FACILITIES

Facility Number	Name	Receiving Stream	Recommended Action	SIZE	Treatment level (4)	BOD ₅	QUD	TKN	P	Institutional Arrangement
4	Hillsboro	North Fork Catoctin Creek WQ (1-23)	Construct new facility	.043 ⁽²⁾	AWT	7 ⁽⁷⁾	-	-	-	Loudoun County Sanitation Authority (LGSA)
2	Middleburg	Wanocopin Creek WQ (1-23)	Construct new facility; abandon old facility	.135	AST	14 ⁽⁶⁾	-	-	-	LGSA
3	Middleburg East and West	Unnamed tributary to Goose Creek WQ (1-23)	Abandon—pump to new facility							
4	Round Hill	North Fork Goose Creek	No further action recommended	.2	AWT	10 ⁽⁶⁾	-	-	-	Town of Round Hill
5	St. Louis	Beaver Dam Creek WQ (1-23)	Construct new facility	.086	AST	20 ⁽⁶⁾	-	-	-	LSCA
6	Waterford	South Fork Catoctin Creek WQ (1-23)	No further action recommended	.058	AST	24 ⁽⁶⁾	-	-	-	LSCA
7	Hamilton	Unnamed tributary to South Fork of Catoctin Creek WQ (1-23)	Upgrade and or expand	.605 ⁽²⁾	AWT	7 ⁽⁷⁾	-	-	-	Town of Hamilton
8	Leesburg	Tuscarora Creek (1-24)	Upgrade and or expand	2.5	AWT	1 ⁽⁹⁾	-	4	0.4	Town of Leesburg
9	Lovettesville	Dutchman Creek WQ (1-23)	Upgrade and or expand	.269 ⁽²⁾	AWT	7 ⁽⁷⁾	-	-	-	Town of Lovettesville
10	Purcellville	Unnamed tributary to North Fork Goose Creek WQ (1-23)	No further action recommended	.5	AST	15 ⁽⁶⁾	-	-	-	Town of Purcellville

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11	Paeonian Springs	Unnamed tributary to South Fork of Catoctin Creek WQ (1-23)	Construct new facility	.264 ⁽²⁾	AWT	7 ⁽⁷⁾	-	-	-	LCSA
12	Cedar Run Regional	Walnut Branch or Kettle Run WQ (1-27)	Construct new facility	1.16 ⁽²⁾	AWT	1 ⁽⁶⁾	-	4	0.1	Fauquier County Sanitation Authority
13	Vint Hill Farms	South Run (1-27)	Upgrade and/or expand	.246	AST	14 ⁽⁶⁾	-	-	2.5	U.S. Army
14	Arlington	Four Mile Run WQ (1-25)	Upgrade and/or expand	30 ⁽³⁾	AWT	3 ⁽⁶⁾	-	4	0.2	Arlington County
15	Alexandria	Hunting Creek WQ (1-26)	Upgrade and/or expand	54	AWT	3 ⁽⁶⁾	-	4	.02	Alexandria Sanitation Authority
16	Westgate	Potomac River WQ (1-26)	Abandon—pump to Alexandria							
17	Lower Potomac	Pohick Creek WQ (1-26)	Upgrade and/or expand	36(3)	AWT	3/8	-	4	0.2	Fairfax County
18	Little Hunting Creek	Little Hunting Creek WQ (1-26)	Abandon—pump to Lower Potomac							
19	Doque Creek	Doque Creek WQ (1-26)	Abandon—pump to Lower Potomac							
20	Fort Belvoir 1 and 2	Doque Creek WQ (1-26)	Abandon—pump to Lower Potomac							
21	Lorton	Mills Branch WQ (1-26)	Upgrade and/or expand	4.0	AWT	3 ⁽¹⁴⁾	-	4	0.1	District of Columbia
22	UOSA	Tributary to Bull Run WQ (1-27)	Expanded capacity by 5 mgd increments	10.0 ⁽³⁾	AWT	1 ⁽⁶⁾	-	4	0.1	USOA
23	Gainesville Haymarket	Tributary Rock Branch WQ (1-27)	Abandon Pump to UOSA							
24	Potomac (Mooney)	Neabsco Creek WQ (1-26)	Construct new facility	12 ⁽³⁾	AWT	3 ⁽⁶⁾	-	4	0.2	Ocequan-Woodbridge Dumfries-Triangle Sanitary District
25	Belmont	Marumsco Creek WQ (1-26)	Abandon—pump to Potomac							
26	Featherstone	Farm Creek WQ (1-26)	Abandon—pump to Potomac							
27	Neabsco	Neabsco Creek WQ (1-26)	Abandon—pump to Potomac							
28	Dumfries	Quantico Creek WQ (1-26)	Abandon—pump to Potomac							
29	Dale City #1	Neabsco Creek WQ (1-26)	Upgrade and/or expand	4.0	AWT	3 ⁽⁶⁾	-	4	0.2	Dale Service Corporation (DSC)
30	Dale City #8	Neabsco Creek WQ (1-26)	Upgrade and/or expand	2.0	AWT	3 ⁽⁶⁾	4	4	0.2	DSC

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31	Quantico Mainside	Potomac River WQ (1-26)	Upgrade and/or expand	2.0	AWT	3 ⁽⁶⁾	-	4	0.2	U.S. Marine Corps
32	Aquia Creek	Austin Run WQ (1-26)	Construct new facility	3.0	AWT	3 ⁽⁶⁾	-	4	0.2	Aquia Sanitary District
33	Aquia	Aquia Creek WQ (1-26)	Abandon—pump to new facility							
34	Fairview Beach	Potomac River (estuary)	Construct new facility	.05	Secondary	Secondary	-	-	-	Fairview Beach Sanitary District
35	Dahlgren	Upper Machodoc Creek WQ (1-28)	Upgrade and/or and-expand	.2	Secondary	Secondary	-	-	-	Dahlgren Sanitary District
36	Colonial Beach	Monroe Creek EL (1-28)	No further action recommended	.85	Secondary	28 ^{(5),(13)}				Town of Colonial Beach
37	Machodoc Kinsale		Construct new facility	.89	Secondary & Spray Irrigation	48 ^{(10),(13)}	-	-	-	Machodoc Kinsale Sanitary District
38	Callao		Construct new facility	.25	Secondary & Spray Irrigation	48 ^{(10),(13)}	-	-	-	Callao Sanitary District
39	Heathsville		Construct new facility	.10	Secondary & Spray Irrigation	48 ^{(10),(13)}	-	-	-	Heathsville Sanitary District
40	King George Courthouse	Pine Creek	Construct new facility	.039	Secondary	30 ⁽¹³⁾	-	-	-	King George County

TABLE B2—NOTES: POTOMAC RIVER SUB-BASIN—RECOMMENDED PLAN FOR WASTEWATER TREATMENT FACILITIES

⁽¹⁾ Year 2000 design flow 201 Facility Plan, P.L. 92-500, unless otherwise noted.

⁽²⁾ Year 2000 average flow from Potomac/Shenandoah 303(e) Plans, Vol V-A Appendix, 1975 pp. B-33-B-44.

⁽³⁾ Future expansion at unspecified date.

⁽⁴⁾ Secondary treatment: 24-30 mg/l BOD₅, advanced secondary treatment (AST): 11-23 mg/l, advanced wastewater treatment (AWT): <10mg/l BOD₅. A range is given to recognize that various waste treatment processes have different treatment efficiencies.

⁽⁵⁾ Effluent limits calculated using mathematical modeling.

⁽⁶⁾ Effluent limits based on Occoquan Watershed Policy, presented under reevaluation.

⁽⁷⁾ Effluent limits based on treatment levels established by the Potomac/Shenandoah 303(e) Plan, Vol. V-A 1975, p. 237, to protect low flow streams and downstream water supply.

⁽⁸⁾ Effluent limits based on Potomac River Embayment Standards, presently under reevaluation. Nitrogen removal limits deferred until reevaluation is complete.

⁽⁹⁾ Effluent limits based on Dulles Watershed Policy, recommended for reevaluation. Interim effluent limits of 12 mg/l BOD₅ and 20 mg/l Suspended Solids will be met until the Dulles Area Watershed Standards are reevaluated.

⁽¹⁰⁾ Effluent limits based on Virginia Sewerage Regulation, Section 33.02.01.

⁽¹¹⁾ Interim effluent limits of 30 mg/l BOD₅, 30mg/l Suspended Solids, and 4 mg/l Phosphorus, will be effective until average daily flows exceeds 0.75 MGD. At greater flows than 0.75 MGD, the effluent limitations will be defined by the Potomac Embayment Standards.

⁽¹²⁾ Secondary treatment is permitted for this facility due to the the extended outfall into the main stem of the Potomac River.

⁽¹³⁾ This facility was also included in the Rappahannock Area Development Commission (RADCO) 208 Area-wide Waste Treatment Management Plan and Potomac-Shenandoah River Basin 303 (e) Water Quality Management Plan.

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TABLE B3—SHENANDOAH RIVER SUB-BASIN RECOMMENDED SEGMENT CLASSIFICATIONS

SEGMENT NUMBER	DESCRIPTION OF SEGMENT	MILE TO MILE	CLASSIFICATION
1-1	North River main stream and tributaries excluding segments 1-1a, 1-1b	56.4-0.0	EL
1-1a	Muddy Creek main stream and War Branch, RM 0.1-0.0	3.7-1.7	WQ
1-1b	North River main stream	16.1-4.6	WQ
1-2	Middle River main stream and tributaries excluding segments 1-2a, 1-2b	69.9-0.0	EL
1-2a	Middle River main stream	29.5-17.9	WQ
1-2b	Lewis Creek main stream	9.6-0.0	WQ
1-3	South River main stream and tributaries excluding segment 1-3a	52.2-0.0	EL
1-4	South Fork Shenandoah main stream and tributaries excluding segments 1-4a, 1-4b, 1-4c	102.9-0.0	EL
1-4a	South Fork Shenandoah main stream	88.1-78.2	WQ
1-4b	Hawksbill Creek main stream	6.20-0.0	WQ
1-4c	Quail Run main stream	5.2-3.2	WQ
1-5	North Fork Shenandoah main stream and tributaries excluding segment 1-5a, 1-5h	108.9-0.0	EL
1-5a	Stony Creek main stream	19.9-14.9	WQ
1-5b	North Fork Shenandoah main stream	89.0-81.4	WQ
1-6	Shenandoah River main stream and tributaries excluding segments 1-6a, 1-6b	57.4-19.8	EL
1-6a	Stephens Run main stream	8.3-0.0	WQ
1-6b	Dog Run main stream	5.2-0.0	WQ
1-7	Opequon Creek main stream and tributaries excluding segments 1-7a, 1-7b	54.9-23.6	EL
1-7a	Opequon Creek main stream	32.3-23.6	WQ
1-7b	Abrams Creek main stream	8.7-0.0	WQ
1-8	All Virginia streams upstream of Opequon-Potomac confluence that have headwaters in Frederick County	--	EL
1-9	All Virginia streams upstream of Opequon-Potomac confluence that have headwaters in Highland County	--	EL

* R.M. = River Mile, measured from the river mouth

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TABLE B4 – SHENANDOAH RIVER SUB-BASIN – RECOMMENDED PLAN FOR SELECTED INDUSTRIAL WASTEWATER TREATMENT FACILITIES

FACILITY NUMBER	NAME ⁽¹⁾	INDUSTRIAL CATEGORY	RECEIVING STREAM CLASSIFICATION	RECOMMENDED WASTELOAD ALLOCATION ⁽²⁾			COMPLIANCE SCHEDULE
				BOD ₅	TKN	NH ₃ -N	
4	Wampler	Food Processing	War Branch WQ (1-1a)	84 ⁽³⁾	-	-	None
6	Wayn-Tex	Plastic and Synthetic Materials Mfg.*	South River WQ (1-3a)	44 ⁽⁵⁾	-	-	None
7	DuPont	Plastic and Synthetic Materials Mfg.*	South River WQ (1-3a)	600	-	50	None
8	Crompton-Shenandoah	Textile Mills*	South River WQ (1-3a)	60	173 ⁽⁴⁾	88	None
10	General Electric	Electroplating*	South River WQ (1-3a)	BPT Effluent Limits			None
12	Merck	Miscellaneous Chemicals (Pharmaceutical)*	S. F. Shenandoah River WQ (1-4a)	3454	2846	1423	Consent Order
17	VOTAN	Leather, Tanning and Finishing*	Hawksbill Creek WQ (1-4b)	240	75	-	None
21	National Fruit	Food Processing	N. F. Shenandoah River WQ (1-5b)	(6)	(6)	(6)	None
22	Rockingham Poultry	Food Processing	N. F. Shenandoah River WQ (1-5b)	(6)	(6)	(6)	None
23	Shen-Valley Meat Packers	Food Processing	N. F. Shenandoah River WQ (1-5b)	(6)	(6)	(6)	None
35	O'Sullivan	Rubber Processing* Machinery and Mechanical Products Manufacturing	Abrams Creek WQ (1-7b)	BPT Effluent Limits			None

TABLE B4 – NOTES: SHENANDOAH RIVER SUB-BASIN – RECOMMENDED PLAN SELECTED INDUSTRIAL WASTEWATER TREATMENT FACILITIES

- ⁽¹⁾-An * identifies those industrial categories that are included in EPA's primary industry classification for which potential priority toxic pollutants have been identified.
- ⁽²⁾-Allocation (lb/d) based upon 7Q10 stream flow. Tiered permits may allow greater wasteloads during times of higher flow. BPT = Best Practicable Technology.
- ⁽³⁾-A summer 1979 stream survey has demonstrated instream D.O. violations. Therefore, the identified wasteload allocation is to be considered as interim and shall be subject to further analysis.
- ⁽⁴⁾-The NPDES permit does not specify TKN but does specify organic N of 85 lb/d. TKN is the sum of NH₃-N and organic N.
- ⁽⁵⁾-This allocation is based upon a flow of 0.847 MGD.
- ⁽⁶⁾-The total assimilative capacity for segment WQ (1-5b) will be developed from an intensive stream survey program and development of an appropriate calibrated and verified model. Wasteload allocations for National Fruit, Rockingham Poultry and Shen-Valley will be determined after the development of the calibrated and verified model and the determination of the segment's assimilative capacity.

TABLE B5 – SHENANDOAH RIVER SUB-BASIN - RECOMMENDED PLAN FOR SELECTED MUNICIPAL WASTEWATER TREATMENT FACILITIES

NAME	FACILITY
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FACILITY NUMBER	NAME	RECOMMENDED RECEIVING STREAM	FACILITY			WASTELOAD ALLOCATION ⁽²⁾ lb/d BOD ₅	INSTITUTIONAL ARRANGEMENT	COMPLIANCE ⁽⁴⁾ SCHEDULE
			RECOMMENDED ACTION	SIZE ⁽⁶⁾	TREATMENT LEVEL ⁽²⁾			
2	Harrisonburg Rockingham Reg. Sewer Auth.	North River WQ (1-1)	RECOMMENDED ACTION	SIZE ⁽⁶⁾	TREATMENT LEVEL ⁽²⁾	2,000 ⁽⁶⁾	Harrisonburg-Rockingham Regional Sewer Authority	None
3	Verona	Middle River WQ (1-2a)	Construct new facility, abandon old plant, correct I/I	0.8	Secondary	Secondary Limits	Augusta County Service Authority	July 1, 1983
4	Staunton	Middle River WQ (1-2a)	Upgrade, provide outfall to Middle River, correct I/I	4.5	Secondary	Secondary Limits	City of Staunton	July 1, 1983
5	Fishersville	Christians Creek EL (1-2)	No further action recommended	2.0	Secondary	Secondary Limits	Augusta County Service Authority	None
9	Waynesboro	South River WQ (1-3a)	Upgrade, correct I/I	4.0	AWT with nitrification	250 ⁽⁶⁾	City of Waynesboro	July 1, 1983
11	Grottoes	South River EL (1-3)	Construct new facility	0.225	Secondary	Secondary Limits	Town of Grottoes	No existing facility
13	Elkton	S.F. Shenandoah River WQ (1-4a)	Construct new facility, abandon old plant	0.4	Secondary	Secondary Limits	Town of Elkton	July 1, 1983
14	Massanutten Public Service Corporation	Quail Run WQ (1-4c)	No further action recommended	1.0	AWT	84.0 ⁽⁶⁾	Private	None
15	Shenandoah	S.F. Shenandoah River EL (1-4)	Upgrade, expand, correct I/I	0.35	Secondary	Secondary limits	Town of Shenandoah	No existing facility
16	Stanley	S.F. Shenandoah River EL (1-4)	Construct new facility	0.3	Secondary	Secondary limits	Town of Stanley	No existing facility
18	Luray	Hawksbill Creek WQ (1-4b)	Construct new facility, abandon old plant, correct I/I	0.8	Secondary	Secondary Limits	Town of Luray	July 1, 1983
19	Front Royal	Shenandoah River EL (1-6)	Construct new facility, abandon old plant, correct I/I	2.0	Secondary	Secondary Limits	Town of Front Royal	July 1, 1983
20	Broadway	N.F. Shenandoah River WQ (1-5b)	Upgrade, expand, investigate I/I	(6)	(6)	(6)	Town of Broadway	July 1, 1983
24	Timberville	N.F. Shenandoah River WQ (1-5b)	Upgrade, expand, investigate I/I	(6)	(6)	(6)	Town of Timberville	July 1, 1983
25	New Market	N.F. Shenandoah River EL (1-5)	Upgrade, investigate I/I	0.2	Secondary	Secondary Limits	Town of New Market	July 1, 1983
26	Mount Jackson	N.F. Shenandoah River EL (1-5)	Upgrade, expand, correct I/I	0.2	Secondary	Secondary Limits	Town of Mount Jackson	July 1, 1983
27	Edinburg	N.F. Shenandoah River EL (1-5)	Upgrade, expand, investigate I/I	0.15	Secondary AST	Secondary Limits 65	Town of Edinburg Public	July 1, 1983 None
28	Stony Creek Sanitary District	River EL (1-5) Stony Creek WQ (1-5a)	No further action required	0.6	AST	65	Public	

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29	Woodstock	N.F. Shenandoah River EL (1-5)		0.5	Secondary	Secondary Limits	Town of Woodstock	July 1, 1983
30	Toms Brook-Mauertown	Toms Brook EL (1-5)	Construct new facility	0.189	Secondary	Secondary Limits	Toms Brook	No existing facility
31	Strasburg	N.F. Shenandoah River EL (1-5)	Upgrade, expand, correct I/I	0.8	Secondary	Secondary Limits	Town of Strasburg	July 1, 1983
32	Middletown	Meadow Brook EL (1-5)	Upgrade, expand	0.2	Secondary	Secondary	Town of Middletown	July 1, 1983
33	Stephens City Stephens Run	Stephens Run EL (1-6a)	Upgrade, expand	0.54	AST	72	Frederick-Winchester Service Authority	July 1, 1983
34	Berryville	Shenandoah River EL (1-6)	Upgrade, provide outfall to Shenandoah River, investigate I/I	0.41	Secondary	Secondary Limits	Town of Berryville	July 1, 1983
36	Frederick-Winchester Regional	Opequon Creek WQ (1-7a)	Construct new facility, abandon county and city plans, correct I/I	6.0	AWT with nitrification	456 ⁽⁷⁾	Frederick-Winchester Service Authority	July 1, 1983
37	Monterey	West Strait Creek EL (1-9)	Upgrade, correct I/I	0.075	Secondary	Secondary Limits	Town of Monterey	July 1, 1983

TABLE B5 – NOTES: SHENANDOAH RIVER SUB-BASIN – RECOMMENDED PLAN FOR SELECTED MUNICIPAL WASTEWATER TREATMENT FACILITIES

⁽¹⁾ Year 2000 design flow (MGD) unless otherwise noted.

⁽²⁾ Secondary treatment: 24-30 mg/l BOD₅, advanced secondary treatment (AST): 11-23 mg/l BOD₅, advanced wastewater treatment (AWT): <10 mg/l BOD₅. A range is given to recognize that various waste treatment processes have different treatment efficiencies.

⁽³⁾ Recommended wasteload allocation calculated using mathematical modeling based upon 7Q10 stream flows. Tiered permits may allow greater wasteloads during periods of higher stream flows. Allocations other than BOD₅ are noted by footnote.

⁽⁴⁾ The July 1, 1983, date is a statutory deadline required by P.L. 92-500, as amended by P.L. 92-217. The timing of construction grant funding may result in some localities to miss this deadline.

⁽⁵⁾ Year 2008 design.

⁽⁶⁾ This BOD loading is based on a 7Q10 flow rate of 26.8 cfs at the HRRSA discharge.

⁽⁷⁾ NH₃-N = 50 lb/d.

⁽⁸⁾ This allocation is based on a TKN loading no greater than 84 lb/day.

Water Body	Permit No	Facility Name	Outfall No.	Receiving Stream	River Mile	Parameter Description	WLA	Units WLA
VAV-B02R	VA0023281	Monterey STP	001	West Strait Creek	3.85	CBOD5	11.4	KG/D
VAV-B08R	VA0065552	Opequon Water Reclamation Facility	001	Opequon Creek	32.66	BOD5, JUN-NOV	207	KG/D
		AKA Winchester – Frederick Regional				CBOD5, DEC-MAY	1514	KG/D

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<u>Water Body</u>	<u>Permit No</u>	<u>Facility Name</u>	<u>Outfall No.</u>	<u>Receiving Stream</u>	<u>River Mile</u>	<u>Parameter Description</u>	<u>WLA</u>	<u>Units WLA</u>
VAV-B14R	VA0025291	Fishersville Regional STP	001	Christians Creek	12.36	BOD5	182	KG/D
VAV-B23R	VA0060640	North River WWTF	001	North River	15.01	CBOD5, JAN-MAY	1030	KG/D
	7.23.04	AKA Harrisonburg – Rockingham Reg. Sewer Auth.				CBOD5, JUN-DEC	606	KG/D
						TKN, JUN-DEC	303	KG/D
						TKN, JAN-MAY	545	KG/D
VAV-B32R	VA0002160	INVISTA - Waynesboro	011	South River	25.3	BOD5	272	KG/D
		Formerly Dupont - Waynesboro						
VAV-B32R	VA0025151	Waynesboro STP	001	South River	23.54	CBOD5	227	KG/D
						CBOD5, JUN-OCT	113.6	KG/D
VAV-B35R	VA0024732	Massanutten Public Service STP	001	Quail Run	5.07	BOD5	37.85	KG/D
VAV-B37R	VA0002178	Merck & Company	001	S.F. Shenandoah River	88.09	BOD5	1570	KG/D
						AMMONIA, AS N	645.9	KG/D
VAV-B49R	VA0028380	Stoney Creek Sanitary District STP	001	Stoney Creek	19.87	BOD5, JUN-NOV	29.5	KG/D
VAV-B53R	VA0020982	Middletown STP	001	Meadow Brook	2.19	CBOD5	20.8	KG/D
VAV-B58R	VA0020532	Berryville STP	001	Shenandoah River	24.23	CBOD5	42.6	KG/D